

Document #559 Rosson, Clay Individual

Dear Don Metzler and DOE Staff-

Even though a preferred alternative was not listed in the Atlas Tailing's Pile DEIS, persuasive argument was made for removal of some material at the mill-site based on the information provided in the report. In the alternative of capping the pile, the EIS states that the pile will eventually subside and reach the water table. Will the increased pressure of capping increase the rate of subsidence? The EIS states that levels of contaminants to the river will be restored to flux rates equivalent to the previous groundwater levels once the base of the tailing pile comes into contact with the water table. An argument could be made that the pile would be left behind for future generations to remove with the addition of the material that would comprise of the proposed cap. This would make future removal even more expensive.

If we were mining and processing uranium in 2005, it would not be taking place on the bank of a major river. Therefore, the mess was left behind from a more naïve time in the 1940's where legal environmental constraints or the awareness of point source contamination did not exist, and the public had little knowledge of cancer or the effects of uranium and radon on human health.

Contaminants of concern listed in the Draft Report are not necessarily emphasizing radioactive metals, the source of radon and ammonia. The plumes of radionuclide and other metal contaminants reaching background levels within miles downstream may be misleading for reassuring the public. In the case of radionuclides, Grand County has many radioactively hot creeks and disturbed uranium mining areas along the Colorado River as well as radioactive geological layers that all combine to naturally and unnaturally increase the background levels in the river.

Lake Powell and Lake Mead have been sinks in the their lake bed sediments for uranium and other metals for the past 50+ year lifespan of the tailings pile due to their anoxic depths. This could continue for hundreds or thousands of years if the pile is capped in place creating places where the pile will continue to increase the background radiation. The river system will continue to concentrate uranium processing metals as they are soluble in their mobile oxidative state and insoluble and immobile when reduced in anoxic waters of deep reservoirs. Sinks such as the reservoirs along the Colorado River will slowly increase their radiation in the depth of their lake beds. Any future disturbance of water flow as during prolonged drought and increasing demand on the waters of the Colorado River will at times create low water levels in the reservoir once again making the metals mobile downriver. Once the metals and other contaminants of concern are in the current in an oxidative state, any attempt at downstream remediation will not be cost effective. It should be said that the cheapest alternative may be removal of the pile because the true cost of leaving the pile on the bank or capping it in place may not be calculable in terms of future effects to human health or downstream remediation efforts.

I truly believe that any money spent on this site should be on removal of material from the pile and processing ponds rather than dumping more material at the site. Immediately spending \$166 Million on material removal by truck would be a more effective means of re-contouring the pile, lessening the subsidence effect, and remediating the hottest areas like processing ponds which are creating larger contaminant plumes than the pile itself. Taking the barrels of materials

out of the pile could also be done in this first stage. Another important step would be to remove a portion of the pile likely to be in contact with the river at higher flood stages.

The DOE should choose the least expensive option of moving the materials by truck to Klondike Flats, and setting up a disposal cell removing as much material as can be for the \$166 Million. A smaller pile can be recontoured, vicinity properties can be remediated, and processing sites adjacent on the mill site can be excavated to the Klondike Flats location. The most important first action would be to make the biggest impact on the site for the least amount of money in the same fashion as the Interim Groundwater Remediation has provided---the biggest effect for the money available. We have a window of opportunity at this time with all the current political momentum to give this site and the river some relief.

Six or seven years ago this pile was not in the media, papers, or discussed amongst politicians. It had only been the subject of scientific studies yet not a part of public discourse. The public was not informed about the nature of this site whether locally or nationally. Information was not readily available about the Atlas Tailing Pile. The pile is no longer a mystery.

I want to thank the DOE office of Grand Junction for providing information for the law makers, and state and federal agencies as well as the public to weigh in on the fate of this site. I still believe that this site should be completely remediated without regard to cost because the awareness to do so in the past did not exist. This is a vestige of the atomic age and military endeavors, and it is all our duty to our national heritage to make sure that this land that we have inherited is not destroyed at the same time that it is defended with nuclear arms and powered by nuclear energy. Moreover, this site is violating the Clean Water Act as it is impairing a water body and Endangered Species Act. There will not likely be a chance to meet TMDL criteria at the Cane Creek location as stipulated by the Utah Department of Environmental Quality in the future if the complete pile is capped in place or the No Action alternatives are followed.

The Atlas Tailings pile is within the watershed of the Colorado River. As part of the eventual comprehensive watershed plan that will be developed for protecting the Colorado River in the upper basin states, sensible efforts should be made to mitigate sites such as this mill site, as well as mining sites just upriver, and the tailings pile submerged beneath Lake Powell to their effects on water quality. Materials should be removed from the mill site not brought to the mill site. If the pile is to be capped, I believe that some of the worst materials should be removed completely from the site first as mentioned. The pile could be recontoured only after the core of highly contaminated sediments and slimes have been removed. Much of the pile near the river would be scaled back away from flood stage and determined if it should be removed from site or relocated on-site. A plan to satisfy all parties for now would be to remove the hottest materials and sources of pollution, and evaluate the next steps once these initial goals were accomplished and plumes re-characterized.

I provide these comments as a private citizen who once inhabited in Grand County, and as a scientist in the field of hydrology and environmental engineering in an effort to bring forth fresh ideas. I do not represent SAIC, my employer, in these comments.

Clay A. Rosson

Document #560 Carlson, Virginia Individual

From: Ginny Carlson [ginny@wyn.org]
Sent: Friday, February 18, 2005 9:59 AM
To: moabcomments
Subject: Comments on draft EIS

I have pasted my comments in text below in case you have difficulty reading the MS-WORD formatted attachment. Both the text in the email and the attachment are identical.

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COMMENTS ON: Remediation of the Moab Uranium Mill Tailings,
Grand and San Juan Counties, Utah
Draft Environmental Impact Statement, November 2004
(DOE/EIS-0355D)

SUBMITTED BY: Virginia Carlson, Moab, Utah

DATE: February, 17, 2005

To Whom It May Concern:

I am a resident of Moab, Utah and live a few miles away from the tailings pile. I drive by the pile several times a week and am often downstream of the pile. For the following quality of life issues I support moving the tailings pile north of its present location either to Klondike Flats or Crescent Junction.

1. The pile is located in a very scenic area bordering both Arches National Park and the Colorado River. The pile is visually ugly and greatly distracts from the beautiful vistas. Residents of Moab should not have to live with this visual impairment just because the current location of the pile was convenient during the uranium era.

2. If all or part of the tailings pile was undermined by high waters of the Colorado, the economic impact on Moab would be catastrophic. It would also put downstream river users (including me) at risk for an unknown number of years.

3. The Colorado River is one of the great rivers of the west and it must be taken care of. Leaving a large tailings pile on its flood plain does not make any kind of sense.

4. All cooperating agencies have agreed that the best long term solution is to move the tailings pile.

5. I have been near the pile during the spring winds and have seen dirt and dust blow from the site.

I have reviewed the draft EIS and I have the following specific comments on the document and on other information I have read about the tailings pile.

A. Page S-41 Consequences of Uncertainty;

9. If river migration and encroachment were to occur to a great degree, significantly lessening the transport distance from the disposal cell to the

river, surface water ammonia concentrations and concentrations of other contaminants of concern could revert to nonprotective levels, and additional engineered remedies or pile relocation could be necessary to meet UMTRCA requirements, potentially increasing program costs by tens to hundreds of millions of dollars. At the extreme, perpetual treatment or mitigation might be required, or the pile would have to be relocated after all on-site reclamation efforts and costs had been committed.

Since the historical tracking of the river is for a very short time frame (100+ years) and the DEIS is supposed to provide a 200-1,000 year solution, the DOE has not proved that leaving the tailings on the bank of the Colorado River is a safe long term solution. Both the State of Utah and the USGS disagree with conclusions use in the DEIS that the Colorado River is migrating away from the tailings pile. Since there is major disagreement among scientists and engineers, and since a miscalculation by DOE could result in moving the pile after it is stabilized at an enormous increase in costs, then a reasonable solution is to move the pile, not cap it in place.

B. Page S-41 Consequences of Uncertainty;

10. If 20 to 80 percent of the tailings pile were washed into the river, it would have serious adverse impacts on the riparian plant and animal life and would affect the health and safety of residents along the river and of river guides who may spend up to 50 days on the river in a given year. Such a flood event could also affect the tourist economy of Moab if users of the river corridor avoided the area after such an event.

There was no suitability study done before the tailings pile was located on the banks of the Colorado River. This location was not selected for any reason other than convenience for transportation for uranium mining. The DEIS contains no proof that the current location is appropriate for long term storage of toxic materials. Again a prudent and reasonable conclusion is to move the tailings pile. If the tailings pile were washed into the river, the DEIS contains no discussion on how the river banks could be cleaned up which makes one come to the conclusion that the river banks could never be made safe for use in the foreseeable future.

C. COSTS. I have tried to reconcile the costs quoted in the management summary and from Pages 2-180 and 4-40. It appears that the costs in the management summary do not reflect the total costs of any of the options. The EIS must state clearly the costs of EACH option and must provide backward compatible tables so that a reasonably adept person can review the cost tables for errors and omissions.

D. MOVING OTHER TAILINGS PILES. I understand that there were 22 tailings sites located near rivers. For all others it was deemed appropriate to move them. That is overwhelming evidence that Moab Tailings pile should also be moved away from the Colorado River banks. The DEIS did not specifically discuss remediation of other riverbank sites in the DEIS. Remediation of similar sites must be included.

E. US GOVERNMENT RESPONSIBILITY. The US Government has a responsibility to clean up toxic materials that it caused. Clean up does not mean capping in place on a flood plain.

F. GROUND WATER. It is stated in the DEIS (page S-9) that "Ground Water Remediation
? Cost \$10.75 million for design and construction and \$906,000 annually under both on-site and off-site disposal alternatives

? 75 to 80 years to complete under either on-site or offsite disposal alternatives

This does not make any sense. Ground water remediation should not cost the same for a large pile left on the site versus the remediation of "leftover" dirt after moving the tailings. The DOE did not include information that supported this theory. It also does not make any sense remediation should take 75-80 years whether or not the tailings pile is moved. If the pile is not moved, remediation should take much longer.

G. WIND AND FLOODING. The DEIS assumes that if the Colorado River had a major flood, the waters would be slow moving and flood the lowlands near the current site. What was not mentioned that if the river did this type of flooding, once the flood receded, the dried residue would become airborne during spring winds, which are strong and constant over the entire Colorado Plateau.

H. REASONABLE SOLUTIONS. The purpose of a DEIS is to discuss reasonable solutions to a problem. There is nothing reasonable about a proposal of using slurry to White Mesa. Why was this alternative even included? Or if it had to be included, why didn't the DOE state that it was not a reasonable alternative as they did on storing the wastes in empty salt mine caverns?

I. UPRIVER DAM FAILURE. I did not see an analysis of the result of a possible dam failure up river from the Tailings pile except in the Consequences of Uncertainty. A detailed analysis of the upriver dams must be prepared if the DOE wishes to select a Cap In Place Alternative.

Please remember, we are neither smart enough nor strong enough to beat "Mother Nature". The only prudent decision is to move the tailings pile out of the path of potential flooding.

Sincerely,

Virginia Carlson
3136 Far Country
Moab, Utah 84532
Email: ginny@wynn.org

**Document #567 Lynch, Esq. Robert Irrigation & Electrical Districts Association of
Arizona**

Page 1 of 1

Cathy Thomas

From: Bob Lynch [rslynch@rslynchaty.com]

Sent: Friday, February 18, 2005 11:59 AM

To: moabcomments

Subject: Draft Environmental Impact Statement on the Remediation of the Moab Uranium Mill Tailings

Please see attached comment letter.

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2/18/2005

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#567,
P.2
CHARLES W. SLOCUM
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ASSISTANT SECRETARY-TREASURER

E-MAILED ONLY

February 18, 2005

Don Metzler
Moab Federal Project Director
U.S. Department of Energy
2597 B $\frac{3}{4}$ Road
Grand Junction, Colorado 81503

Re: Draft Environmental Impact Statement on the Remediation of the Moab Uranium Mill Tailings

Dear Mr. Metzler:

We are pleased to write to you to support your efforts to identify a strategy for removal of the Moab uranium tailings pond near the Colorado River in Utah. Your draft EIS identifies that the tailings pond itself is partially located within the 100-year flood plain of the Colorado river. Additional sites likely contaminated around the tailings pond are also more extensively included in the 100-year flood plain.

It seems to us who rely on the Colorado River downstream of this potential disaster that the only sane thing to do is to move the tailings pond out of both the 100-year and 500-year flood plains of the Colorado River. We will not comment on which of the ultimate destinations is best nor will we comment on the various methodologies you have identified for moving the tailings pond. Suffice it to say that any strategy for leaving the tailings pond in place is, in our view, not worthy of further consideration in this EIS. This is a ticking time bomb and it is only a matter of time before it goes off.

Additionally, we are pleased to note that the Department of Energy proposed budget for fiscal year 2006 contains a significant increase in investment in dealing with this problem. The \$26 million proposed for this effort will go a long way toward meeting the ultimate requirement of nearly a half billion dollars for accomplishing this critical environmental cleanup.

Thank you for consideration of our views. Please keep us advised of further developments in this Environmental Impact Statement process.

Sincerely,

/s/

Robert S. Lynch
Counsel and Assistant Secretary/Treasurer

RSL:psr

cc: Arizona Congressional Delegation
IEDA Members

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